834-F-5 NS1:20/2:SE 80-26
AUG 1 8 1981

Guide for Preparation of Proposals and Project and Award Management

COMPLETED
37
ORIGINAL

# WOMEN IN SCIENCE

## Science Career Workshops
## Science Career
## Facilitation Projects

DIVISION OF SCIENTIFIC
PERSONNEL IMPROVEMENT
NATIONAL SCIENCE FOUNDATION
WASHINGTON, D.C. 20550

CLOSING DATE: JANUARY 2, 1980
*see inside front cover

## PROGRAM SCHEDULE

| Closing Date for Receipt of Proposals | Grant Award Dates | |
|---|---|---|
| | Science Career Workshops | Science Career Facilitation Projects |
| January 2, 1980 | June 1980 | August 1980 |

### NUMBER OF AWARDS

The number of awards to be made in 1980 will depend on the total dollars available to the Women in Science Program and the total amount required for the projects judged to be most worthy of funding. The Foundation hopes to support 15 to 20 Science Career Workshop Projects and 7 to 10 Science Career Facilitation Projects.

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# A. GENERAL PROGRAM DESCRIPTION

The Women in Science Program was established in fiscal year 1976. Its objective is to develop and test methods to attract women to and retain them in scientific careers. The projects supported under the Women in Science Program are experimental, in that they are attempts to discover educational approaches and techniques that will be useful to the Nation in increasing the percentage of women who are scientists and the percentage of scientists who are women. Furthermore, the Program itself is experimental in that the pattern of support varies from year to year. The variations are based on evaluation of past projects and studies to determine what other kinds of approaches might be successful.

In 1976 the staff of the Science Education Directorate of the National Science Foundation worked with the Committee on Minorities and Women in Science of the National Science Board, which is the policy-making body of the Foundation, to develop a program plan. According to the plan developed and approved by the full board, the Women in Science Program was to direct its efforts to three target audiences: college and university students, women with degrees in science who are not in science, and high school students.

In fiscal years 1976 through 1979 a total of 99 grants were made for Science Career Workshop projects in 36 states, the District of Columbia, and Puerto Rico. Of these, 93 were for women students in colleges and universities (69 for those at the freshman and sophomore level, 21 for those at the junior and senior level, and 3 for those in graduate school) and 6 for women who have at least a bachelor's degree in science and are unemployed or underemployed in science.

A total of 33 grants were made from 1976 through 1979 for Science Career Facilitation Projects designed for women with degrees in science who need a specially designed educational experience in order to enter or reenter science. Of these, 21 were for new projects and 12 for the continuation of six projects initiated in 1976 and six in 1977. Proposals for new projects were not invited in 1978 and 1979, because the Foundation wished to evaluate the program concept before initiating additional efforts.

In 1977 the Research Triangle Institute (RTI) of North Carolina planned a Visiting Women Scientists program in which established women scientists were to spend a day in selected high schools throughout the country. RTI implemented this plan in a pilot program carried out in academic year 1977-78 in 110 senior high schools and in a follow-up program in 1978-79 in 140 secondary schools, of which 31 were exclusively or partially at the junior high level.

All three components of the Women in Science Program have been evaluated. (A number of publications resulting from evaluation and dissemination activities have been prepared or are in preparation. See page 30 for information about their availability.) As a result of these evaluations, solicited and unsolicited recommendations from those in the scientific and educational communities, and NSF staff experience, several significant changes have been introduced this year in the Women in Science Program. Most of these changes will be described in detail in the following pages. Stated briefly they are:

**Science Career Workshops**

1 The career break that presently is experienced by at least 40% of women scientists will be a major theme in the Workshops, and a greater participation in the Workshops by women scientists who are unemployed or underemployed will be required.
2 Eligibility to compete for Workshop grants will be expanded from institutions of higher education to include other not-for-profit organizations with scientific expertise.
3 The development of a continuing activity will be of equal importance to the Workshop itself.
4 Maximum funding for these two-phase Workshop projects will be increased from $12,000 to $20,000.

**Science Career Faciliation Projects**

1 More emphasis has been placed on the requirement for the institutionalization of Science Career Facilitation Projects.
2 Proposals for Science Career Facilitation Projects will be accepted from institutions that have not received previous awards from NSF as well as from previous grantees.
3 Maximum levels of funding have been established. In the case of renewal awards, a sig-

nificant institutional contribution will be required.

**Projects at the High School Level**

1 The Visiting Women Scientists Program will not be renewed. In order to stimulate the development of similiar programs, RTI has prepared a Manual on Program Operations based on the knowledge and experience it gained in conducting the pilot and 1978-79 programs. RTI has also prepared a Women Scientists Roster containing the names and addresses of approximately 1,300 women scientists, engineers, and mathematicians across the country who are interested in visiting junior and senior high schools to encourage females to consider science careers. Information about the availability of these materials is given on page 30.
2 If funds permit, a limited number of experimental projects will be supported under the Women in Science Program to encourage young women of high school age to consider careers in science. Information about this Program component will be available later in the year from the Women in Science Program, Division of Scientific Personnel Improvement, National Science Foundation, Washington, D.C. 20550. Requests for this information, accompanied by a mailing label, should be submitted by February 1, 1980.
3 In 1980 the NSF Science Education Directorate as a whole is placing special emphasis on three priority thrusts: early adolescence, groups underrepresented in science (women, minorities, and physically handicapped), and out-of-classroom science learning. Of particular interest to those wishing to carry out development and research involving science education for adolescent females are the Development in Science Education (DISE) Program and the Research in Science Education (RISE) Program. These programs are also concerned with science education for women at more advanced levels. Information about DISE and RISE can be obtained from the Division of Science Education Development and Research, National Science Foundation, Washington, D.C. 20550.

## B. SCIENCE CAREER WORKSHOPS

### OBJECTIVE

The objective of this activity is to provide factual information and practical advice regarding careers in science to at least one of three target groups: (1) women who have at least a bachelor's degree in science and who are unemployed in science or underemployed in science in terms of their potential, (2) women undergraduate students majoring in science, and (3) women graduate and postdoctoral students in science. In providing this information and advice an important theme must be the career break that presently is experienced by at least 40% of women scientists. To achieve the objective, Workshop projects are to have two phases: (A) a Workshop and (B) a continuing activity that will build on the experience and capitalize on the enthusiasm generated by the Workshop.

### INSTITUTIONAL ELIGIBILITY

Proposals may be submitted by 2-year and 4-year colleges and universities offering majors in fields of science supported by NSF. Proposals will also be accepted from scientific societies and other not-for-profit organizations that have special expertise and capabilities to promote science education of women. Institutions that have received Science Career Workshop grants in previous years are eligible to submit proposals. Only one proposal may be submitted by an institution for a Science Career Workshop award. Institutions submitting a proposal for a Science Career Facilitation Project award this year are also eligible to compete for a Science Career Workshop award.

### SCOPE AND DESIGN OF WORKSHOP (PHASE A)

**Fields of Coverage.** The Workshops conducted by colleges and universities and other multidisciplinary organizations must be multidisciplinary in scope and cover the physical, biological, medical (but not clinical), environmental, social, and behavioral sciences, as well as mathematics and engineering, and interdisciplinary fields which combine two or more sciences (e.g. meteorology, geochemistry, and bioengineering). They are not to cover medical technology, physical therapy, nursing, and similar science-related fields not supported by NSF. An organization devoted to a single science discipline may limit its coverage to that discipline, but it should conduct its Workshop

in such a way that it might serve as a model for other fields.

**Duration.** Either a single Workshop or a series of Workshops may be held, but if a series is held there should be no more than six months between the first and the last. Each workshop is expected to be 1 or 2 days in length. Those planning to hold Workshops on a weekend should consider the fact that some participants may wish to attend religious services. The Workshop or series of Workshops is to be held during academic year 1980-81, unless unusual circumstances make necessary a postponement to 1981-82.

**Selection of Participants.** Workshops may be devoted entirely to unemployed and underemployed women scientists or may have a mixture of target groups. In the case of a mixed Workshop every effort must be made to have the non-student group comprise at least one-third of the participants. Student participants, if selected, should be limited to those who are majoring in science or who plan to major in science. In the case of a Workshop conducted by an educational institution, the student participants may not be limited to its own enrollees.

Participants may be selected from any geographic location. In selecting participants, consideration should be given to the need to increase the representation in science of women from disadvantaged ethnic minority groups and women who are physically handicapped. Special efforts should also be made to attract students from junior and community colleges.

The number of participants in a Workshop (or series of Workshops) will vary according to a number of factors, such as the target population and the facilities available for holding large meetings. A rule of thumb to be applied is that the total cost of the Workshop phase of the project (a maximum of $12,000 as described below) divided by the number of participants should not exceed $100.

While the Workshops are to be designed to meet the needs of the target groups described earlier, projects are encouraged to open up selected portions of the activities, such as speeches by eminent women scientists, to other students, faculty, high school teachers and counselors, and members of the general public.

**Types of Information and Advice.** The types of information and advice to be provided by a Workshop will depend on the target groups participating. All participants should be given *candid* information about career opportunities in various fields of science and various sectors of the economy, both nationally and regionally. Those who have completed or will soon complete their formal education should be presented with techniques for locating jobs, preparing resumes, and otherwise obtaining employment in science. Women who received science degrees a number of years ago should be given advice about the need for updating and augmenting their scientific knowledge and skills and how and where such education might be obtained. Undergraduates should be informed about the options for employment available to those who terminate their formal education at the bachelor's level or obtain graduate degrees and how these options vary from field to field. They should also be given practical advice about selecting a graduate school, gaining admission, applying for fellowship and other types of support, and what to expect once accepted as graduate students.

All students, undergraduate and graduate, should be made aware of the problems faced by women who choose to combine careers with homemaking and given suggestions of methods that might be used to prevent or lessen scientific obsolescence during career breaks. Those who are majoring in fields where job opportunities are limited should be advised of ways to improve their chances of employment, such as taking courses outside of their major fields or obtaining practical experience through part-time or summer employment.

During the actual Workshop, dissemination of these kinds of information and advice may be achieved by dividing participants at some points into subsections according to their fields and educational status.

## SCOPE AND DESIGN OF CONTINUING ACTIVITY (PHASE B)

Of equal importance to the Workshop itself is the development of a continuing activity, for which start-up funds will be provided, but which is expected to continue after NSF support stops. This activity should deal primarily with the obsolescence brought about by the career breaks many women choose, or are forced, to make. Creative but practical plans are sought that will deal either with the prevention (in the case of students) or the amelioration (in the case of those who have completed their formal education) of career-break ob-

solescence. There need not be a direct relationship between the continuing activity and the Workshop. Examples of activities being initiated under 1979 awards are an educational clearinghouse to provide information on types of science training available to mature women and a network to help women scientists make transitions in times of unemployment or career changes. As in the case of the Workshop itself, the continuing activity must be multidisciplinary except in the case of an organization devoted to a single discipline. While the period of support for the continuing activity is not prescribed, the total project (Phases A and B) should be completed in no more than 24 months.

## STAFFING

The projects may be planned and conducted by science departments or other appropriate units of the grantee institution. In conducting these projects, a grantee institution will be expected to bring in scientists from other educational institutions, industry, and government, as well as manpower and employment experts, career counselors, and other specialists, as may be necessary to supplement its own capability. In selecting Workshop presenters (speakers, panelists, etc.) consideration should be given to their ability not only to provide information and advice, but also to motivate the participants to persevere in the pursuit of their career goals.

While it is important that women play a major role in planning and carrying out Workshop projects, men should also be involved for several reasons: They share with women the responsibility of providing equity in education and employment; women need to know that many men support their aspirations to become scientists; participation in the projects by men can sensitize them to the problems faced by women seeking careers in science; and since men occupy most of the decision-making positions in science, their active cooperation is needed to achieve the objectives of the Women in Science Program.

## EVALUATION

A clear plan must be described for evaluating both phases of the project. For guidance on how to carry out an evaluation, reference should be made to the bibliography on page 19. In addition to the self-evaluation of the project, the Foundation will, as part of its own program development activities, monitor selected Workshop projects. On pages 20 through 22, outlines are given of the kinds of information that might be useful for your evaluation of Phases A and B.

## CATEGORIES OF SUPPORT

NSF funds for the Workshop (Phase A) may be requested for: (1) travel and subsistence for participants who are not students at the grantee institution, (2) salaries and wages for the Project Director and staff for planning, conducting, and evaluating the Workshop, if these tasks are clearly outside their regular duties, (3) secretarial and clerical help, (4) travel, subsistence, and honoraria for outside experts, (5) communication costs and publicity, (6) other costs such as purchase of career booklets, and (7) indirect costs. In determining indirect costs, support for participants may not be included in the calculation base.

Because of the short-term nature of Science Career Workshops, grantees may wish to use coffee breaks or meal times as opportunities for informal interaction among participants, faculty, and visiting experts. Modest funds may therefore be requested for breaks and for meal costs for local participants (who will not be receiving other subsistence support), as well as for commuting participants.

For the Continuing Activity (Phase B) a specific description of allowable funding cannot be given, as a variety of plans for the development of continuing activities is expected. In general, however, support may be requested for salaries and wages for project staff, secretarial and clerical help, consultant fees, office supplies, educational materials, staff travel, computer services, and associated indirect costs.

The amount to be paid for honoraria for guest lecturers or panelists must not exceed $183 per day. Grant funds may not be used to pay honoraria or consultant fees to employees of the grantee institution. Employees of the Federal Government may be used as guest lecturers, panelists or consultants. However, they may receive compensation and/or expenses from grant funds only if they obtain prior approval from their agencies to participate, and if services to the project are performed outside their regular working hours or while they are on leave status from official duties. Under no circumstances may employees of the National Science Foundation receive compensation and/or expenses from grant funds or from funds obtained by the grantee from

other sources. If NSF employees attend Workshops, their expenses must be covered by internal NSF management funds.

NSF support will be limited to a maximum of $12,000 for the Workshop proper (Phase A) and $8,000 for the development of a continuing activity (Phase B). Thus the maximum award will be $20,000. If the funds awarded for Phase A are not all used, remaining funds may be applied to Phase B, but a transfer of funds in the other direction will not be permitted. If the cost of the total project will exceed the $20,000 grant limit, additional funds must be sought from other sources. Proposers are, in fact, encouraged to seek such support, with the understanding that funds from other sources may not be used in such ways that the design and purpose of the project described in this Guide would be altered.

## PROPOSAL FORMAT

The proposal should contain ten sections, assembled in the order shown. Appendices are optional.

1. **Cover Page.** The sample provided on page 23 should be followed as closely as possible.

2. **Table of Contents.**

3. **Abstract.** This should be a condensed narrative on a separate page, describing the project, not more than 250 words in length, which can be used in reports and summaries.

4. **Description of Institution.** In the case of colleges and universities, a brief description should be given—on a separate page—of the institution submitting the proposal. This description might include the following kinds of information for academic year 1978-79, preferably in tabular form.

a. Total enrollment of the institution
b. Number of female students enrolled (of these, please indicate—if possible—the number who are members of ethnic minority groups or who are physically handicapped)
c. Highest degree awarded in the sciences
d. Number of juniors and seniors who were majoring in a science (2-year colleges should report the number of second-year students who were specializing in a science.)
e. Number of female majors (of these, please indicate—if possible—the number who are members of ethnic minority groups or who are physically handicapped)
f. Total faculty in science departments
g. Number of female science faculty (of these, please indicate—if possible—the number who are members of ethnic minority groups or who are physically handicapped)
h. Other information judged to be relevant to the proposal.

Non-academic organizations should provide information of a similar nature to indicate their commitment to increasing the participation of women in science.

5. **Current Science Education and Research Activities.** This should list all current projects, other than the proposed project, to which the senior personnel have committed a portion of their time, whether or not salary for the person involved is included in the budgets of the various projects. This information should include the titles and dates of current grants or contracts, the source of funds, annual budget levels, and the person-months devoted to each project by each of the senior personnel. This section must also provide analogous information for all other proposed projects which are being considered by, or which will be submitted in the near future to, other possible sponsors including other Foundation programs. Concurrent submission of a proposal to other organizations will not prejudice its review by the Foundation.

6. **Narrative.** This should be a detailed statement of the proposed project constructed with the same care as a paper to be submitted for publication. The narrative portion should not exceed 15 double-spaced pages in length. Reviewers will not be responsible for studying extra pages.

The narrative should include a discussion of the following points in the order listed.

a. Description of the Workshop planned, how it will be carried out, and methods to be used to publicize the Workshop to prospective participants.
b. Criteria for the selection of participants, method of selection, and number of participants expected. Selection on a "first-come, first-served" basis is not appropriate.
c. Description of the plan for the development of a continuing activity. (Those who have previously received grants from NSF for Science Career Workshops should also describe any activities resulting from these grants and their current status.)
d. Description of the plan for evaluating the project, including the types of data to be collected

and the techniques to be used for measuring the impact of the project.

e. Scientific and educational staff and administrators to be involved and a description of the duties of each.

f. Names and qualifications of outside experts to be involved, if they have been identified. If names cannot be given, then there should be a description of the kinds of outside expertise to be sought.

g. Experience of the institution in carrying out similar activities, e.g., career workshops, other kinds of workshops, other kinds of career guidance activities, special projects and programs for women students.

h. Physical resources for carrying out the Workshop and the continuing activity.

i. Schedule for accomplishing the objectives of the project, including the tentative date(s) on which the Workshop will be held.

7. **Budget.** The Foundation requires a summary budget prepared in accordance with Summary Proposal Budget (see pages 24 and 25). Please note that lines A through Q of this form are to indicate that portion of the project costs to be paid from NSF funds. If non-NSF funds are to be used, the remainder of the project budget should be itemized on an attached separate page, using the categories and general format of Summary Proposal Budget. In addition to submitting a Summary Proposal Budget covering both Phases A and B, proposers must prepare separate budgets for each phase. The sample form given on page 26 should be used for Phase A. No particular form is prescribed for Phase B, but it should clearly reflect the narrative description of this Phase.

8. **Fiscal Discussion.** Following the budget for each phase, a brief discussion should be given to justify the level of support requested, category by category.

9. **Vitae.** A curriculum vitae should be presented for each person having a significant role in the project, including outside experts, whether actually receiving NSF support or not. Two co-directors may be used, but one of these must be designated as the person who will assume the responsibility for carrying out the project as proposed. The name of the person so designated is the one that should be given on the cover page. Concern has been expressed by several individuals consulted by NSF that a large commitment of time and effort to women-in-science activities on the part of scientists can be deleterious to their own career advancement. Assuming this may be true in some institutional settings, NSF has no objection to an arrangement in which the co-director with the heaviest administrative load is a non-scientist whose own career may be advanced by such a task. However, there must be strong scientific expertise available either in a co-director and/or other project staff who will make the major decisions in the project regarding substantive science. If two co-directors are named, the proposal should make clear how their skills are complementary and what their respective duties will be.

10. **Statement of Commitment.** This should take the form of a letter or memorandum to the Project Director submitting the proposal from an administrative official of the institution and should state the intention of the institution to support in appropriate ways the continuing activity initiated under the grant.

11. **Appendices.** Material that is supplementary to the text of the proposal may be included in appendices. Institutional catalogs, departmental curricula, or other general material should NOT be included. Each appendix should be tabbed or printed on colored paper or prepared in some manner to make it easily distinguishable from the body of the proposal. Voluminous appendices cannot be read by reviewers in the time available for proposal evaluation.

In preparing their proposals, applicants should refer to the following criteria by which their proposals will be evaluated:

Design of Workshop: the degree to which

- the information and advice provided will be appropriate, complete, and presented in an interesting manner
- the plans for recruitment and selection of participants will result in the number desired and an appropriate mix of participants
- the plan for evaluation is feasible and will provide a good measure of outcomes

Design of Continuing Activity: the degree to which

- the activity will be effective in helping women to deal with the obsolescence brought about by career breaks
- the grantee institution will be able to sustain the activity initiated under the grant
- the plan for evaluation is feasible and will provide a good measure of outcomes

Management: the degree to which

- staff responsibilities are clear, supervision is adequate, and scheduling is reasonable

  Personnel: the degree to which
- the institution's personnel have the expertise and time to carry out the project successfully
- the outside experts proposed will contribute positively to the project

  Institutional Capability: the degree to which
- the institution has available resources and relevant experience for carrying out the project

  Costs: the degree to which
- the amount requested from NSF is appropriate for the activity proposed

## C. SCIENCE CAREER FACILITATION PROJECTS

### OBJECTIVE

The objective of this activity is to facilitate the entry or reentry of women with at least a bachelor's degree in science into careers in science or into graduate education in science by means of a specially designed educational experience. The target group is women who received their last science degree at least 2 years before their acceptance as participants in the projects and who are either unemployed or underemployed in science. To achieve the objective, projects must: (1) provide the training necessary for this career facilitation, and (2) institutionalize the projects so that the training will continue after NSF support ceases.

### INSTITUTIONAL ELIGIBILITY

All 4-year colleges and universities offering at least bachelor's degrees in fields of science supported by NSF are technically eligible to submit proposals. However, each submitting institution will be required to present strong evidence that it is located in a geographic area where a substantial pool of potential participants lives or to which potential participants will be willing to relocate for the training period. It will also be required to present evidence of good employment opportunities in the proposed field of training in the vicinity of the institution, if it is expected that most participants will eventually seek employment in that area. Institutions that received previous support for a Science Career Facilitation project are eligible to submit proposals for *new* awards in different fields or for *renewal* awards in the same field, but the funding pattern will be different for renewals, as explained below. Only one proposal may be submitted by an institution for a Science Career Facilitation Project. Institutions submitting a proposal for a Science Career Workshop award this year are also eligible to compete for a Career Facilitation award.

### SCOPE AND DESIGN OF PROJECTS

**Types of Projects.** Projects supported to date have generally been one of three types: (A) those to upgrade participants from a single field—for example, chemistry—in that same field; (B) those to provide training in a field different from the original field(s) of the participants—for example, engineering for a group of participants whose backgrounds are in mathematics, physics, chemistry, etc; or (C) those to upgrade a group of participants from a variety of fields—for example, mathematics, biology, sociology, etc.—in their original fields and to augment this training with knowledge and skills in a different field—for example, computer science—so that the participants will acquire interdisciplinary backgrounds. While it is expected that most proposals submitted this year will be one of these types, creative variations are encouraged.

**Fields of Training.** Proposals for projects designed to upgrade participants in their original field or to train them in a different field (types A and B) may be directed to any one field of science supported by NSF, including interdisciplinary fields such as bioengineering. The fields supported by NSF include the mathematical, physical, medical, biological, engineering, and social sciences; they do not include clinical, education, or business fields, history, or social work. Proposals for projects designed to upgrade in the original field and to augment this training with knowledge and skills from another field (type C) may be multidisciplinary with respect to the original fields of the partipants but the augmentation should be in a single field such as computer science. In the case of all project types, one criterion for evaluation will be the extent to which the proposal demonstrates that the field in which training is proposed is characterized by excellent opportunities for employment and advancement. (See the first evaluation criterion on page 11.)

**Selection of Participants.** It is expected that those selected for participation will be committed to seeking scientific employment or entrance to graduate school as soon as their training is completed. It is also expected that special efforts will be made to encourage the participation of minority, low-income, and physically handicapped women. While there is no upper limit on the number of years since a participant received her last degree in science, Project Directors will be expected to exercise judgment as to whether an applicant has a good chance of successfully completing her training.

**Academic Component of the Project.** This component is to consist of courses developed especially for the participants (short courses, semester-long, or year-long) supplemented by such activities as the institution's regular courses, courses developed by other educational institutions or professional societies, independent study, research participation, and internships in industrial or governmental laboratories. These activities may be held during the academic year, summer sessions, or both. In deciding on the kinds of activities to include in a project, consideration should be given to the special academic needs individual participants are likely to have, to the need for some education experiences that *all* the participants will share (in order to develop peer support), and to the need for participants to have some contact with regular students (in order to develop self-confidence, if needed). Consideration should also be given to the fact that in some projects the needs will differ somewhat for those who intend to seek employment and those who intend to enter graduate school after their training is complete. In these cases, two tracks may be desirable. In all cases, the use of previously developed course materials and modules, independent study, and other *cost-effective* techniques is especially encouraged.

**Amount of Training.** In general, participants will be expected to carry the equivalent of *at least* half a normal academic load. The period of training for an individual will vary according to the type of project and the academic load being carried. Types (B) and (C) projects can be expected to require a longer period of training than Type (A) projects. In no case should the period of training exceed 24 months. Reasons should be given for any interruptions in the training period (other than normal academic holiday periods). While the awarding of a special certificate may be sufficient in the case of Type (A) projects to guarantee employment or entrance to graduate school, in some cases the awarding of course credits or even a B.S. or M.S. degree may be necessary in Types (B) and (C) projects. In such cases, if a degree is not awarded, the participant should be taken to a point where she can obtain a degree within a reasonable period of time by taking additional course work on her own.

**Non-Academic Component of the Project.** In addition to the knowledge and skills provided by the academic component, participants should receive some guidance with respect to techniques for seeking employment, what will be expected of them as professionals in their fields of training, and adjusting to what for some what will be new life styles. Psychological counseling, women's resource centers, and other support services available to regular students should also be available to the participants. Projects will be expected to do all that is possible to find suitable jobs or graduate programs for those who successfully complete their training.

**Outcomes.** It is not the purpose of this program to prepare women for technician-type positions. The participant outcome therefore is to be an increase in the student's knowledge and skills to the point where she can immediately enter graduate school or obtain a *professional* position with the potential of career advancement. The institutional outcome is to be the incorporation of the project (or a suitable modification of the project) into the institution's regular educational program, so that after expiration of this grant women with science degrees seeking to enter or reenter science can continue to obtain the training necessary to do so. Projects are also expected, to some degree, to have salutary effects on faculty attitudes and the general educational practices of the grantee institution and to serve as models for other institutions.

## STAFFING AND ADVISORY COMMITTEE

The project staff should consist of individuals who possess not only the requisite scientific, educational, counseling, and administrative skills, but also a good understanding of the problems of reentry women and the ability to deal with them in a sensitive way. Two codirectors may be used, but the proposal should make clear how their skills are complementary and what their respective duties will be. In carrying out their projects, grantee institutions will be expected to develop cooperative arrangements with other educational institutions, industrial organizations, government agencies,

professional societies, and women's organizations that can contribute to the goals of the projects. An integral part of the project should be an Advisory Committee consisting of representatives of such organizations as well as potential employers.

## EVALUATION

Grantees will be expected to carry out formative evaluations and to modify their projects as necessary on the basis of their findings. Such evaluations are expected to be more important and to require more funds in the case of new projects. Reference should be made to page 19 for guidance on how to carry out evaluations. The Foundation, as part of its own planning and evaluation activities, can be expected to carry out evaluations of supported projects, both during and after the period of NSF support. Thus proposers should be prepared to collect data necessary for internal and external evaluation and to cooperate with NSF evaluators.

Grantees will be required to collect data on applicants and participants, staff involvement, and costs and to provide information on such matters as methods for recruiting and selecting participants, activities pursued by each participant, cooperative arrangements with other organizations, participant outcomes, and institutional outcomes.

## CATEGORIES OF SUPPORT

**Operational Support.** Funds may be requested from NSF for the development of new courses, the modification of existing courses, and the teaching of these courses to project participants. Funds may also be requested for tuition costs to enable participants to take existing courses, although it is hoped tuition will be waived in most cases. In no case may both tuition and the cost of teaching be requested from NSF for the same course. Other eligible uses for NSF funds include staff time devoted to supervising independent study or research participation; educational materials and computer time; consultant fees (not to exceed a daily rate per consultant of $183); advertising the program and recruiting participants; counseling the participants; project evaluation; efforts to place the participants in jobs or graduate schools; travel within the United States to report on the results of the project (including one trip to the National Science Foundation to attend a Project Directors' meeting), and indirect costs. Strong justification will be required for the purchase of special purpose equipment—defined as an item of property that has an acquisition cost of $500 or more and an expected life of two years or more. Purchase of general purpose equipment is excluded.

**Participant Support.** Stipends for participants to partially offset travel expenses, cost of textbooks, and living expenses may be requested according to the following formula: Number of full-time equivalent students x average number of months in training x $50. For example, a project with 20 full-time students and 10 half-time students who are in training an average of 10 months may request $12,500 (25 x 10 x $50). It is realized that this budget item will have to be calculated on the basis of an estimate, but if the number of full-time equivalent students varies appreciably from the estimate, budget reallocations can be made with the approval of NSF. Institutions may request less than the amount calculated by the above formula. In general, projects that will involve relocation from other cities during the training period, a long period of training, full academic loads, or more than one of these characteristics can be expected to request more for participant stipends than those having fewer or none of these characteristics. It will be the responsibility of the grantee institution to distribute the total stipend allotment on the basis of perceived need.

## LEVEL AND DURATION OF SUPPORT

For projects that have been previously funded by NSF, the maximum *renewal* award will be $150,000. These grants will be for a period of three years and nonrenewable. In projects where the period of student participation is 12 months or less it is expected that at least two groups of participants would be trained during the period of the grant. An institutional contribution will be required each year, with the percent of total project costs borne by the grantee increasing in the second and third years as NSF support is phased out. The institution is expected to contribute at least one-third of the total costs for the project. Funds for the institutional contribution may include those obtained from other sources such as industry, private foundations, and government agencies other than NSF. The institutional contribution may also include tuition paid by participants for courses not covered by the NSF grant.

For *new* projects (submitted either by institutions that have received previous Career Facilita-

tion awards in a different field or by institutions with no previous support from NSF) a maximum *initial* award of $100,000 will be made to successful proposers. This award will be expected to carry the project through the training and placement of one group of participants. An institutional contribution is encouraged but not required. The requested project duration should not exceed 30 months. While renewal support for the most successful projects initiated in 1980 will depend on a number of factors, including the availability of funds, it is the present intention of the Foundation to invite renewal proposals in 1982. Any renewal award made in that year will be nonrenewable, an institutional contribution will be required, and a maximum will be established for the amount awarded.

## PROPOSAL FORMAT

The proposal should contain ten sections, assembled in the order shown.

1. **Cover Page**. The sample provided on page 27 should be followed as closely as possible.
2. **Table of Contents**.
3. **Abstract**. This should be a condensed narrative on a separate page describing the project, not more than 250 words in length, which can be used in reports and summaries.
4. **Description of Institution and Department(s)**. On a separate page or two a brief description should be given of the institution submitting the proposal and the department(s) to be involved. This description should include the following kinds of information for 1979-80, preferably in tabular form:
   a. Total enrollment of the institution
   b. Number of female students enrolled (of these, please indicate—if possible—the number who are members of ethnic minority groups or who are physically handicapped)
   c. Highest degree awarded in the sciences
   d. Number of juniors, seniors, and graduate students who were majoring in the discipline of proposed training
   e. Number of female majors (of these, please indicate—if possible, the number who are members of ethnic minority groups or who are physically handicapped)
   f. Total faculty in the discipline of proposed training
   g. Number of female science faculty (of these, please indicate—if possible—the number who are members of ethnic minority groups or who are physically handicapped)
   h. Other information judged to be relevant to the proposal.

   If more than one department or unit is to be involved in an interdisciplinary project, data for items d, e, f, and g should be provided for each of the cooperating units.
5. **Current Science Education and Research Activities.** This should list all current projects, other than the proposed project, to which the senior personnel have committed a portion of their time, whether or not salary for the person involved is included in the budgets of the various projects. This information should include the titles and dates of current grants or contracts, the source of funds, annual budget levels, and the person-months devoted to each project by each of the senior personnel. This section must also provide analogous information for all other proposed projects which are being considered by, or which will be submitted in the near future to, other possible sponsors including other Foundation programs. Concurrent submission of a proposal to other organizations will not prejudice its review by the Foundation.
6. **Narrative**. This should be a detailed statement of the proposed project constructed with the same care as a paper to be submitted for publication. The narrative portion should not exceed 30 double-spaced pages in length. Reviewers will not be responsible for studying extra pages.

   The narrative should include a discussion of the following points in the order listed:
   a. Selection of Field of Training: Presentation of evidence of good opportunities for employment and advancement of women in the field for which training is proposed, both nationally and in the area where training is to be given.
   b. Description of Project: Kinds of courses, research participation, etc. to be offered; number of participants to be selected; method of selection; counseling and placement plans; efforts to institutionalize the project. In proposals for renewal awards, reference should be made, as necessary, to

the status report of the project for which additional support is requested (see Appendices below).

c. Rationale for Proposed Approach

d. Description of the plan for evaluating the project, including the types of data to be collected and the techniques to be used for measuring the impact of the project.

e. Management Plan: Assignment of responsibilities among the project staff, supervisory controls, and schedule of activities.

f. Qualifications of Staff to Carry Out this Kind of Project: Scientific, educational and/or administrative qualifications; sensitivity to the problems of women returning to science.

g. Institutional Capability: Description of the resources of the institution and the experience it has had in carrying out similar projects.

h. Expected Outcomes
- —on participants
- —on involved faculty, particularly with respect to their own career advancement
- —on the involved department(s)
- —on the grantee institution with respect to institutionalization of the supported project and on educational practices in science departments not directly involved in the project
- —on other institutions

7. **Budget**. The Foundation requires a summary budget prepared in accordance with Summary Proposal Budget (see pages 24 and 25). Please note that lines A through Q of this form are to indicate that portion of the project costs to be paid from NSF funds. If non-NSF funds are to be used, the remainder of the project budget should be itemized on an attached separate page, using the categories and general format of Summary Proposal Budget. In addition to submitting a Summary Proposal Budget covering the three years of support, proposers submitting requests for renewal awards must submit an addendum, in tabular form, showing clearly the funds requested from NSF and the institutional contribution for each year.

8. **Fiscal Discussion**. Following the budget pages, a brief discussion should be given to justify the level of support requested, category by category.

9. **Vitae**. A curriculum vitae should be presented for each person having a significant role in the project, whether their services are to be funded by NSF or not. Two co-directors may be used, but one of these must be designated as the person who will assume the responsibility for carrying out the project as proposed. The name of the person so designated is the one that should be given on the cover page.

10. **Appendices**. Proposals for renewal awards must contain as an appendix a succinct but complete report on the status of the project for which additional support is being requested. Of particular importance is a description of the current status of past and current participants and the degree to which the project has been institutionalized. The inclusion of other appendix material is optional. Institutional catalogs, departmental curricula, or other general material should NOT be included. Each appendix should be tabbed or printed on colored paper or prepared in some manner to make it easily distinguishable from the body of the proposal. Voluminous appendices cannot be read by reviewers in the time available for proposal evaluation.

In preparing their proposal, applicants should refer to the following criteria by which their proposals will be evaluated:

Selection of Field: the degree to which
- convincing evidence is presented of good opportunities for employment and advancement of women in the field for which training is proposed, both nationally and in the geographic area where training is to be given

Design of the Project: the degree to which
- the activities proposed will be successful in recruiting the desired quantity and quality of participants and in providing the kind of training needed
- participants will be successfully placed in graduate school or in professional scientific positions with a good choice of advancement
- the project will be successfully institutionalized
- the project will have positive effects on the general science education program of the grantee institution and on other institutions

Management: the degree to which

- staff responsibilities are clear, supervision is adequate, and scheduling is reasonable

Personnel: the degree to which

- the institution's personnel have the expertise and time to carry out the project successfully
- the proposed Advisory Committee has the type of representation needed

Institutional Capability: the degree to which

- the institution has available resources and relevant experience for carrying out the project

Costs: the degree to which

- the total cost of the project (NSF funds + other funds) is appropriate in terms of the expected outcomes
- the institutional contribution is adequate

# D. SUBMISSION OF PROPOSALS

### STATEMENT OF INTENT TO SUBMIT

Informal or preliminary proposals will not be considered. To assist the Foundation in preparing for its review of proposals, institutions planning to submit proposals are requested to complete and return an Intent-to-Submit Card (found on the inside back cover of this announcement) at least 10 days prior to the closing date.

This information is important to the NSF staff in preparing for an adequate review. However, returning the card does not commit either the individual or the institution to submitting a proposal, and failure to return the card does not disqualify the institution from submitting a proposal.

### PROCEDURE FOR SUBMISSION OF PROPOSALS

1. Fifteen (15) copies of the complete proposal are required.
2. Five (5) extra copies of the Cover Page and Abstract are required.
3. Copy should be double-spaced on standard (not legal) size paper.
4. Pages are to be numbered at bottom center.
5. The Cover Page is the letter of transmittal. Institutional letters of endorsement or transmittal, supporting letters, institutional forms, etc., if included, must be appended to the proposal. When placed over the Cover Page they delay processing and increase chances for error.
6. Proposals are to be assembled in the order shown on page 5 or 10 and should be stapled in the upper left-hand corner only.
7. All 15 copies of the proposal and extra copies of the Cover Page and Abstract should be transmitted in a single package. Secure packaging is mandatory. The Foundation cannot be responsible for the processing of proposals damaged in transit.
8. The package should be mailed to:
   Central Processing Section for
   Women in Science Program
   National Science Foundation
   Washington, D.C. 20550

or carried by hand to room 223, 1800 G Street, N.W., Washington, D.C.

### ACKNOWLEDGMENT OF RECEIPT OF PROPOSAL

To facilitate prompt acknowledgment of the arrival of the package at its destination, the proposer should remove the acknowledgment postcards on the back cover of this guide, identify the proposal, address one to the proposed project director and one to the institution's business officer, and attach both firmly to the cover sheet of the official signed copy of the proposal. These cards, confirming the date of receipt of the proposal and assigning a proposal number (which should be used in all subsequent communications), will be returned upon receipt of the proposal package. Note: If such an acknowledgment card has not been received within three weeks of submission, the Foundation's Central Processing Section should be contacted promptly. (202-632-4120).

**NOTE:** The Acknowledgment Cards should not be confused with the Intent-to-Submit Card. The latter is to be submitted well *before* the submission of the proposal, the former *at the same time* the proposal is submitted.

### CLOSING AND AWARD DATES

The closing date for receipt of proposals in both categories is January 2, 1980. Awards for Science Career Workshops will be announced in June 1980

and for Science Career Facilitation Projects in August 1980. No information about the status of any proposal can be provided prior to these award dates.

## E. OTHER CONSIDERATIONS IN SUBMITTING PROPOSALS

### ASSURANCE OF COMPLIANCE WITH CIVIL RIGHTS ACTS

If the applicant university, college, or other organization has not filed an Assurance of Compliance with Title VI of the Civil Rights Act of 1964, as required by NSF regulations, pertinent forms and a copy of the regulations may be obtained by writing to the Division of Grants and Contracts of the Foundation. The required Assurance Form, when completed by the institution, should be submitted to the Division of Grants and Contracts. Once an Assurance Form has been submitted by the applicant organization, it covers all proposals subsequently submitted by any department or other unit of that organization. Individual Assurance Forms are not necessary for each applicant or for each proposal. If there is any question about whether or not an institution has filed an Assurance of Compliance, the institution's business office should be consulted.

### CONFIDENTIAL ASPECTS OF PROPOSALS AND AWARDS

When a proposal results in a grant, it becomes a part of the record of the Foundation's transactions, available to the public upon specific request. Information that the Foundation and the grantee mutually agree to be of a privileged nature will be held in confidence to the extent permitted by law; therefore, any information that the applicant wishes to have the Foundation consider as privileged should be clearly marked as such and sent in a separate statement, two copies of which should accompany the proposal.

A proposal that does not result in a grant may be retained by the Foundation. Such a proposal will be released only: (1) with the consent of the proposer; or (2) to the extent required by law. A proposal may be withdrawn by the proposer at any time prior to final action thereon by the Foundation.

### INDIRECT COSTS

Each proposal may include indirect costs at the rate approved for the institution. If the institution has an approved Educational Services Agreement Rate, this rate should be applied. Proposals should specify the institution's approved rate and, if different, the rate requested for the proposed activities. The approved rate and the base for the computation may be obtained from the business officer of the institution. That person should contact the Foundation's Division of Grants and Contracts, Cost Analysis Section if the organization does not have an approved rate, or is a first-time applicant. If information is needed with regard to an approved rate, call (202/634-7545).

### GRANTEE MANAGEMENT AND ORGANIZATION DATA

If your institution has not received an NSF grant within the past 2 years, please fill out the Applicant Management and Organization Information Card on the back of the brochure and attach it to the original copy of the proposal.

## F. PROPOSAL REVIEW AND AWARD DECISIONS

Proposals will be reviewed and evaluated by appropriate members of the NSF professional staff, assisted by review panels of scientists and educators drawn from two- and four-year colleges, universities, research organizations, and professional scientific societies. In addition, pre-award site visits may be made in the case of Career Facilitation proposals. While final decisions are the responsibility of NSF, the recommendations of these reviewers are an important factor in the Foundation's determination of whether or not a grant will be made. Proposals are supported primarily on the basis of merit, as determined by the reviewing process. In cases of proposals judged to be of essentially equal merit, consideration is given to such factors as geographical distribution, subject-matter coverage, and type of institution.

It cannot be emphasized too strongly that the reviewing panels must base their recommendations on the information contained in the proposal. The most frequent fault of proposals is vagueness. Since primary consideration will be given to the scientific and educational merits of the proposed project, the reputations of institutions and the status and experience of scientists to be involved are relevant only insofar as they are specifically related to the proposed activity.

Reviewers will be instructed to consider the review criteria listed on page 6 and page 11, for Science Career Workshop Projects and Science Career Facilitation Projects, respectively, and to assign a numerical score to each proposal. Reviewers will also be requested to provide comments regarding their ratings. These comments, together with the numerical ratings, will assist the Foundation in making critical judgments and decisions in the selection of proposals for award.

Successful proposers will be notified by means of a copy of the grant letter sent to the appropriate official of the grantee institution by the NSF Grants Officer. All unsuccessful proposers will receive a letter of declination from the Directorate for Science Education.

After final decisions have been announced, the Foundation, upon request, will inform applicants of the reasons for its decision on the proposal. Verbatim copies of reviews, not including the identity of the reviewer, also will be made available to applicants upon request.

## G. PROJECT AND AWARD MANAGEMENT

Unless otherwise indicated all information given in this section applies to both Science Career Workshop and Science Career Facilitation Project awards.

### GRANT ADMINISTRATION

Grants will be administered in accordance with the terms and conditions of the award instrument.

An NSF grant is normally made to an organization, known as the grantee, rather than to the individual principal investigator or project director who proposed to conduct the project. Notification of an award is made by letter signed by the NSF grants officer. The grant establishes a relationship between NSF and the grantee in which:

a. NSF agrees to provide financial support for the project to be performed under the provisions of the grant instrument.
b. The grantee agrees to the performance of the project, to the prudent management of the funds provided by the grant, and to the provisions of the grant instrument.

The grantee is free to accept or reject the grant. Normally, the action to obtain Federal funds constitutes acceptance of a grant once it is made. However, in some cases, NSF may require written acceptance.

All written inquiries of a programmatic or technical nature should be directed to the Women in Science Program, Division of Scientific Personnel Improvement, National Science Foundation, Washington, D.C. 20550. Inquiries about other matters should be directed to the Foundation's Division of Grants and Contracts at the same address. Personal visits to the program staff may be made to Room W-406, 5225 Wisconsin Avenue, N.W., Washington, D.C. or telephone calls directed to (202) 282-7150. (Correspondence should not be sent to the Wisconsin Avenue address.)

## RESPONSIBILITIES OF THE PROJECT DIRECTOR

Operating with the policies and procedures of her/his parent institution and these guidelines, the project director is responsible for arranging and directing the instructional offerings of the project, the selection and supervision of staff and participants, authorizing expenditures of project funds, arranging schedules and facilities for instruction, meals and housing, maintaining liaison with NSF program staff, and the preparation and submission of required reports.

All correspondence regarding the operation of the project must be signed by the project director.

Requests for approval of proposed modification of project plans, and changes in objectives or scope, or in project director, must be signed by the project director and endorsed by the Authorized Institutional Representative. For detailed regulations see NSF Grant Policy Manual.

The Foundation will address all correspondence pertaining to this grant to the project director except that final fiscal information requirements and inquiries pertaining to business matters are sent to the business officer of the grantee institution.

## CHANGE OF PROJECT DIRECTOR

If a change of director becomes necessary, the continuation of the grant will be subject to review by the National Science Foundation, because assessment of the merit of a project is often based in part upon the professional stature and extent of personal involvement of the designated project director. In the event a project director relinquishes active direction of the project and is not replaced, NSF support of the project may be terminated by mutual agreement. No change in project director shall become effective without written confirmation from the Foundation in the form of an amendment to the grant.

In order to implement this review, the following steps should be taken:

1. Under normal circumstances, the retiring project director should nominate her/his successor, who must be approved by the grantee institution.
2. The NSF program officer must be notified by letter of this nomination and provided the proposed project director's name together with a resume of her/his training and qualifications. This letter should be signed by the retiring project director, the recommended successor, and by the appropriate administrative official of the institution.
3. Since it is necessary that adequate guidance be available to the participants at all times, an acting project director should be appointed whenever the regular director is to be away from the activity for any appreciable length of time. If this period is less than 1 month, the letter notifying the program officer of the action needs only the signature of the project director and is not subject to prior Foundation approval.

## DURATION OF GRANT

The grant period extends from the effective date of the award through the expiration date and is that span of time during which the objectives of the project are to be achieved and the grant funds are available for appropriate obligation. This period intentionally is longer than the duration of the project in order to allow time for preparation of reports after the project is concluded. The grant becomes effective on the date specified in the grant letter and expires on the date given in that letter. It is required that all commitments of grant funds be made during the grant period.

## BUDGET FLEXIBILITY

Although the grant budget provides an itemization of operating costs, the project director is permitted to make such transfers among items *within the operating cost category* as she or he deems necessary to effective project operation, to the extent that they are consistent with NSF policy as stated elsewhere in this Guide or in the grant instrument. Changes, however, in the scope, objective, and professional personnel of the project must be approved in advance by the Foundation. Requests should be addressed to the NSF WIS program officer responsible for monitoring the project.

## CHANGE IN NUMBER OF PARTICIPANTS

Funds allocated for participant support may not be used to cover operating costs without prior approval of NSF. If the project director desires, operating funds may be used to support additional participants, but any major change in the number of participants must have prior NSF approval, which should be requested through the program officer.

## TAXABILITY OF STIPENDS

NSF views funds distributed to participants under science education projects as grants-in-aid for educational purposes, not as wages paid for services rendered. The taxability of these stipends, however, is decided by the Internal Revenue Service, State and local tax authorities, and the courts. Advice on this matter should be obtained from the District Director of Internal Revenue in whose district the recipient resides, or from the appropriate local tax authorities. Each student participant should be provided with a copy of this statement.

## SAFETY PRECAUTIONS

Project directors are cautioned to adopt, instruct participants in, and enforce all safety precautions appropriate to the nature of the project. NSF assumes no liability with respect to accidents, bodily injury, illness, or breach of contract or other damages or loss, or with respect to any claims arising out of any activities undertaken with the financial support of an NSF grant, whether with respect to persons, property of the grantee, or third parties.

## ANIMAL EXPERIMENTATION

Project directors are reminded that all animal experimentation must comply with the Laboratory Animal Welfare Act of 1966 (PL 89-544) as amended and Title 9, Code of Federal Regulations. If participants are brought into contact with animal experimentation as an aspect of scientific research, such exposure should include a strong admonition that many procedures justifiable in the research laboratory, conducted under carefully controlled conditions by highly trained persons, are not appropriate for student projects carried out at home, and that the inflicting of pain, infection, or malnutrition upon living vertebrates can be justified only by substantial and meaningful results beyond the scope of the usual student project. Home projects involving animals may easily transgress both moral and legal limits if they are conducted without adequate supervision and control, and may not meet the Federal standards for humane handling, care, treatment and transportation of animals (9 CFR 3.1 et sq.) which apply to any federally funded research facility.

Project directors should give full and careful consideration to the balance between the potential risks and the learning that may be achieved before assigning students to research projects in which animals are to be subjected to pain.

## PROTECTION OF HUMAN SUBJECTS

Prior to undertaking a project involving human subjects in experimentation, the project director must submit to the Foundation's Division of Grants and Contracts (with copy to the program officer) written assurance that he or she will comply with regulations of the Department of Health, Education, and Welfare (Part 46, Subtitle A, Title 45, CFR) concerning the protection of human subjects.

## RECOMBINANT DNA

The grantee is required to adhere to the provisions of NSF Important Notice No. 75, dated April 25, 1979. Subject: Research Involving Recombinant DNA Molecules, and the NIH Guidelines for Recombinant DNA Research, published in the Federal Register, Vol. 43, No. 427, dated December 22, 1978, pp. 60108-60131. Copies of Important Notice 75 are available at no charge from Forms and Publications Unit, NSF, 1800 G St. N.W. Washington, D.C. 20550.

## PROJECT TIME EXTENSIONS

It is expected that projects will be completed within the time period specified in the award instrument. Therefore requests for no-cost time extensions should be submitted only under the most unusual of circumstances.

Requests for no-cost extensions must be received at least 45 days prior to the expiration date of the grant, signed by both the Project Director and the Authorized Organizational Representative. The letter must fully justify the need for the extension, include an estimate of the unobligated funds remaining, and describe a plan for their use. This plan must coincide with the original or amended objectives of the project. The fact that funds remain at the expiration of an award is not justification for an extension.

## GOVERNMENT EXCESS PROPERTY

Grantees are eligible to acquire government excess property (scientific equipment and supplies) through no-cost transfers from the Federal Government to the grantee institution. Those not acquainted with this procedure should request a copy of Important Notice No. 58 and Form SF 122 from the Project Property Section, Division of Grants and Contracts, National Science Foundation, Washington, D.C. 20550. The total value of property to be acquired under a grant is normally limited to the amount of the grant.

## PUBLICITY

Following receipt of the NSF award, project directors may wish to prepare a local news release to inform the public of the project.

Project directors should cooperate with news media as deemed appropriate. In publicizing a project, the words "sponsor" or "sponsorship" should not be used when referring to NSF support. Instead, it should be stated that the project is supported (or supported in part) by a grant from the National Science Foundation.

## PUBLICATIONS

The Foundation encourages the preparation of articles in scholarly and popular journals based on the results of the projects it supports. However, the awardee is responsible for the preparation of the results for publication. The Foundation does not assume responsibility for the accuracy of project findings or their interpretation.

## ACKNOWLEDGMENT AND DISCLAIMER

An acknowledgment of NSF support and a disclaimer must appear in any publication of any material, whether copyrighted or not, based on or developed under an NSF-supported project, in the following terms:

> "This material is based upon work supported by the National Science Foundation under Grant No. (Grantee should enter NSF grant number)."

All materials, except scientific articles or papers published in scientific journals, must also contain the following:

> "Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

## PROJECT REPORTING REQUIREMENTS

### Interim Reports for Science Career Workshop Projects

The program staff should be informed of the final date(s) of the Workshop and furnished with a copy of the final agenda as soon as possible. In addition, the program staff would appreciate receiving, at any time, materials related to the grant, such as news releases, publicity, or articles. An interim report should be submitted within 30 days after the Workshop. This report should give attendance figures and briefly describe (in no more than two pages) the progress made to date in the initiation of the continuing activity.

### Interim Reports for Science Career Facilitation Projects

During the first year of operation, interim reports must be submitted to the program staff on a *quarterly* basis. For the remaining duration of the award, interim reports must be submitted to the Program staff on an annual basis at the end of the academic year. Interim reports should cover such matters as (1) progress to date in comparison with the project schedule, (2) results to date of the ongoing monitoring/evaluation process, (3) problems encountered and methods used in solving them, and (4) circumstances or considerations which might significantly affect subsequent phases of the project. Interim reports should not include requests for NSF approval for major changes. Such requests should in all cases be the subject of separate correspondence.

**Final Project Reports.** (See page 28—Form 98A, Parts I and II.)

The Foundation's grant reporting procedures are as follows: Two copies of the Final Project Report (NSF Form 98A) are to be submitted by the Project Director within 90 days after expiration of the award to:

> National Science Foundation
> Division of Grants and Contracts
> Award Accountability Branch
> Washington, D.C. 20550

(Do *not* send Final Project Report to WIS Program Manager)

The purpose of a Final Report is two-fold. It provides a factual account of the project for the record, and it also provides an opportunity for assessing both the effectiveness of the activity and of the NSF program through which the project was supported. The grantee should bear in mind that the Final Project Report may be used, together with the project abstract prepared at the time of the award, to answer inquiries as to the nature and significance of projects which the Foundation supports. The report should be written in such a way that its contribution will be clear to readers.

**Final Technical Description of Project and Results** (See page 28—Form 98A, Part III).

In addition to the Final Project Report (NSF Form 98A, Parts I and II), a minimum of two copies of the Final Technical Report is required (Form 98A, Part IIIe). While there is no standard form for

the Technical Report, a narrative account is preferred. It should repeat, if necessary, pertinent material from earlier director's reports. Part III of Form 98A, should be submitted directly to the WIS Program Manager within 90 days after the expiration of the award. It should be typed on standard size (8" x 10 1/2" or 8 1/2" x 11") paper, unbound, but stapled in the upper left hand corner, and bear the identification number of the grant. Information on the content of the technical description will be furnished to all grantee institutions.

## Selected Bibliography of Evaluation Literature


1. *An Evaluation Guidebook*, W. James Popham. The Instructional Objectives Exchange, Los Angeles, 1972.
   (A basic "how to" book for the novice evaluator; explains many of the important terms and distinction in the evaluator's language; body of the book is concerned with giving the evaluator a set of guidelines to follow in doing an evaluation; helpful appendix discusses a mock evaluation).
2. *Evaluation Research*, Carol H. Weiss, Prentice-Hall, Inc. Englewood Cliffs, New Jersey, 1972.
   (Presents the rationale for evaluation of programs; discusses a variety of evaluation designs—experimental, quasi-experimental, non-experimental, and comparative evaluation; a basic "how to" book for the novice evaluator).
3. *Education Evaluation, Theory & Practice*, Blaine Worthen and James R. Sanders, Charles A. Jones Publishing Corp., 1973.
   (Large text explaining many of the current theories and viewpoints in evaluation; contains papers by some of the important persons currently working in evaluation).
4. *Evaluating Educational Programs & Products*, Gary D. Borich, Editor, Educational Technology Publications, Englewood Cliffs, New Jersey, 1974.
   (Large volume containing sixteen papers grouped around three topics: establishing perspectives-roles and context; choosing a plan-model and strategies; examining the data-methods and techniques).
5. *Encyclopedia of Educational Evaluation*, Scarvia B. Anderson et al., Jossey-Bass Publishers, San Francisco, 1975.
   (Combines the major concepts of evaluating education and learning programs with the related techniques; a "what is it?" rather than a "how to do it" text).
6. *Developing Skills in Proposal Writing* (2nd Edition), Mary Hall. Continuing Education Publications, Portland, Oregon, 1977.
   (Practical, "how-to" book addressing the whole range of concerns for the proposal writer; contains examples of planning techniques as well as proposals.)
7. *Program Evaluation Kit*, Lynn Lyons Morris, Editor, Sage Publications, Beverly Hills and London, 1978.
   (Eight booklets that cover the major topics to be addressed in any evaluation, from beginning to end of the project; very user-oriented, with many examples and tips.)
8. *Program Evaluation and Review Techniques*, Desmond L. Cook, U.S. Government Printing Office, No. FS 5.212:12024.
   (Brief, clearly written introduction to the application of PERT to educational projects.)

# Outline of Kinds of Information Useful For Evaluating and Reporting Requirements for Phase A Of Science Career Workshop Projects

A. Applicant and Participant Data
   1. Number of applications received
   2. Number of offers made, number of declinations, number of withdrawals, number of drop-outs (a declination is a person who applied, but did not accept the offer to attend when it was made; a withdrawal is a person who applied and accepted an invitation, but before the reporting date notified the Project Director of a change in plans; a dropout is a person who reported on the scheduled date but did not stay until the termination of the Workshop.)
   3. Primary reasons given for declinations and withdrawals
   4. Final number of participants
   5. Data regarding participants (to be provided in summary form for group. No names should be submitted to NSF, although it is expected that the grantee institution might wish to retain names and addresses of participants.)
      a Institution where enrolled
      b Academic level, i.e., post-baccalaureate not pursuing graduate degree, graduate student, undergraduate (specify level)
      c Race or ethnic background
      d Major and minor fields (if decision has been made)
      e Other career-oriented activities in which students have participated during the year prior to attending this Workshop
      f Participant replies to the following kinds of questions, to be asked prior to participation in the Workshop (to save time during the Workshop these might be made part of whatever application form is developed)
         (i) What is your career goal?
         (ii) What plans do you have, if any, to further your education? In what field?
         (iii) Why did you apply (or why are you applying) to attend this Workshop?
      g Participant replies to the following kinds of questions, to be asked at the end of the Workshop *before* participants are dispersed
         (i) What did you get out of the Workshop?
         (ii) What did you like best about the Workshop?
         (iii) What did you like least about the Workshop?
         (iv) As a result of the Workshop . . .
         do you think you might change your career goals? How? do you think you might change your major or minor? If so, in what way?
         do you think you might change your plans with respect to furthering your education? If so, how?

B. Staff Data (Including Outside Experts)
   1. Names of science departments and other units involved at all in planning, execution, and follow-up
   2. Names, titles, training, experience, special qualifications and specific duties of each person who participated significantly in Workshop activities
   3. Estimate of total person-months of professional staff (faculty, administrators, evaluators, outside experts, etc.)
   4. Estimate of total person-months of secretarial and clerical staff
   5. Number of invitations necessary to get the required number of outside experts
   6. Reasons why invitations were not accepted

C. General Information
   1. Selection of participants (method, criteria, problems, successes, etc.)
   2. Components—no more than three—that were important in the achievement of the Workshop objectives
   3. Components—no more than three—that were not as effective as anticipated in helping to meet Workshop objectives
   4. Effects of Workshop on faculty of grantee institution, both those who participated in it and those who did not

5. Effects of Workshop on practices of the grantee institution (anticipated as well as actual)
6. Effects outside the grantee institution (other than those on the participants)
7. Total cost of Workshop including donated services, if any
8. Breakdown of total cost according to:
   a Amount covered by NSF grant
   b Amount provided by grantee institution
   c Amount provided by other sources—name these if possible
   d Amount provided through donated services—estimate if actual figure is not known; specify the nature of the services if possible

## Outline Of Kinds Of Information Useful For Evaluating And Reporting Requirements For Phase B Of Science Career Workshop Projects

A. Activities Resulting Either Directly or Indirectly from the Project, e.g.
   - staff appointments
   - additional workshops held
   - other kinds of meetings held
   - establishment or improvement of counseling services
   - development of materials or courses
   - dissemination of information
   - establishment of information or referral services

B. Involvement of Interested Individuals and Groups, e.g.
   - students
   - faculty
   - women's groups
   - women scientists in the community
   - other educational institutions
   - scientific societies

C. Problems Encountered, e.g.
   - conflicts among individuals and groups
   - indifference on the part of groups or institutions
   - failure to obtain necessary funding or commitment of time

D. Potential for Long-Term Continuation, e.g.
   - commitments by individuals, groups, and institutions
   - promises of financial support
   - possibility of the activity's becoming self-sustaining

# WOMEN IN SCIENCE
# SCIENCE CAREER WORKSHOP PROJECTS
# DIRECTORATE FOR SCIENCE EDUCATION
# COVER PAGE

| | |
|---|---|
| FOR CONSIDERATION BY NSF ORGANIZATIONAL UNIT | WOMEN IN SCIENCE PROGRAM |
| PROGRAM ANNOUNCEMENT/SOLICITATION NO. SE 80-26 | CLOSING DATE: January 2, 1980 |
| NAME OF SUBMITTING ORGANIZATION TO WHICH AWARD SHOULD BE MADE (INCLUDE BRANCH/CAMPUS/OTHER COMPONENTS) | |
| ADDRESS OF ORGANIZATION (INCLUDE ZIP CODE) | |
| TITLE OF PROPOSED PROJECT | SCIENCE CAREER WORKSHOP PROJECT |
| AMOUNT REQUESTED FROM NSF<br>$ | PERIOD OF PROJECT OPERATION:<br>STARTING DATE: ENDING DATE: |
| DIRECTOR'S NAME AND SOCIAL SECURITY NO. (SSN)* (Dr., Prof., Mr., Ms.)<br>_____ SSN _____ | Phone No.<br>Home:*( ) _____<br>Office: ( ) _____ |
| DIRECTOR'S DEPARTMENT | DIRECTOR'S ORGANIZATION IF DIFFERENT FROM SUBMITTING ORGANIZATION |
| Are any funds for the project proposed herein being requested in another proposal to NSF or another Federal agency? _____<br>If yes, indicate NSF program or agency, proposal number(s), date submitted: | |

PROJECT DESCRIPTORS:

A. Highest Science Degree Offered by Proposing Institution:

Associate's _____ Bachelor's _____ Master's _____ Ph.D. _____

B. Field Coverage: Multidisciplinary _____ Single Discipline (specify) _____

C. Number of Participants _____

D. Percentage of Types of Participants:
Postbaccalaureate not pursuing graduate degree _____, graduate students _____, undergraduate students _____

E. Tentative Workshop Date(s): _____

*Submission of social security and home phone numbers is voluntary and will not affect the organization's eligibility for an award. However, they are an integral part of the NSF information system and assist in processing the proposal. SSN solicited under NSF Act of 1950, as amended.

| PROJECT DIRECTOR | AUTHORIZED ORGANIZATIONAL REPRESENTATIVE | OTHER ENDORSEMENT (OPTIONAL) |
|---|---|---|
| Name (Dr.,; Prof.; Mr.; Ms.) | Name (Dr.; Prof.;Mr.;Ms.) | Name (Dr.;Prof.;Mr.;Ms.) |
| Signature | Signature | Signature |
| Title | Title | Title |
| Date | Date | Date |

# SUMMARY
# PROPOSAL BUDGET

| ORGANIZATION AND ADDRESS | FOR NSF USE ONLY<br>PROPOSAL NO. |
|---|---|
| | DURATION (MONTHS)<br>PROPOSED / REVISED |
| PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR | |

| NSF USE | A. SENIOR PERSONNEL (LIST BY NAME; SHOW NUMBERS OF PEOPLE IN BRACKETS; SALARY AMOUNTS MAY BE LISTED ON SEPARATE SCHEDULE) GPM 205.1b | NSF FUNDED MAN MONTHS CAL. | ACAD. | SUMR. | FUNDS REQUESTED BY PROPOSER | FUNDS GRANTED BY NSF (IF DIFFERENT) |
|---|---|---|---|---|---|---|
| | 1. P.I./P.D. | | | | $ | $ |
| | 2. CO P.I./P.D. | | | | $ | $ |
| | 3. CO P.I./P.D. | | | | $ | $ |
| | 4. CO P.I./P.D. | | | | $ | $ |
| | 5. CO P.I./P.D. | | | | $ | $ |
| 11115 | 6. ( ) ← SUBTOTALS A1 - A5 → | | | | $ | $ |
| | FACULTY AND OTHER SENIOR ASSOCIATES (ATTACH EXTRA SHEET IF NECESSARY) | | | | | |
| | 7. | | | | $ | $ |
| | 8. | | | | $ | $ |
| | 9. | | | | $ | $ |
| | 10. | | | | $ | $ |
| | 11. | | | | $ | $ |
| 11117 | 12. ( ) ← SUBTOTALS A7 - A11 → | | | | $ | $ |
| | B. OTHER PERSONNEL (LIST NUMBERS IN BRACKETS) | | | | | |
| 11141 | 1. ( ) POSTDOCTORAL ASSOCIATES | | | | $ | $ |
| 11149 | 2. ( ) OTHER PROFESSIONALS | | | | $ | $ |
| 11150 | 3. ( ) GRADUATE STUDENTS | | | | $ | $ |
| 11152 | 4. ( ) UNDERGRADUATE STUDENTS | | | | $ | $ |
| 11182 | 5. ( ) SECRETARIAL - CLERICAL | | | | $ | $ |
| 11183 | 6. ( ) TECHNICAL, SHOP, OTHER | | | | $ | $ |
| | TOTAL SALARIES AND WAGES (A+B) | | | | $ | $ |
| 11200 | C. FRINGE BENEFITS (IF CHARGED AS DIRECT COSTS) | | | | $ | $ |
| | TOTAL SALARIES, WAGES AND FRINGE BENEFITS (A+B+C) | | | | $ | $ |
| | D. EQUIPMENT (LIST ITEMS AND DOLLAR AMOUNTS FOR EACH ITEM) | | | | | |
| 23181 | TOTAL EQUIPMENT | | | | $ | $ |
| | E. MATERIALS AND SUPPLIES | | | | | |
| 32630 | | | | | $ | $ |
| | F. DOMESTIC TRAVEL | | | | | |
| 42111 | | | | | $ | $ |
| | G. FOREIGN TRAVEL (LIST DESTINATION AND AMOUNT FOR EACH TRIP; GPM 731) | | | | | |
| 42112 | | | | | $ | $ |

## SUMMARY PROPOSAL BUDGET

PROPOSAL NO.

| | | | |
|---|---|---|---|
| 52500 | H. PUBLICATION COSTS/PAGE CHARGES | $ | $ |
| 62315 | I. COMPUTER (ADPE) SERVICES | $ | $ |
| | J. CONSULTANT SERVICES (IDENTIFY CONSULTANTS BY NAME AND AMOUNT; GPM 516) | | |
| | | $ | $ |
| | K. PARTICIPANT SUPPORT COSTS, IF ALLOWED BY PROGRAM GUIDE (ITEMIZE) GPM 518 | | |
| | 1. STIPENDS $ | | |
| | 2. TRAVEL $ | | |
| | 3. SUBSISTENCE $ | | |
| | 4. OTHER - SPECIFY $ | | |
| | 5. TOTAL PARTICIPANT COSTS (K1 + K2 + K3 + K4) | $ | $ |
| | L. ALL OTHER DIRECT COSTS (List items and dollar amounts. Details of subcontracts, including work statements and budget, should be explained in full in proposal.) | | |
| | $ | | |
| | $ | | |
| | $ | | |
| | $ | | |
| 65001 | TOTAL OTHER DIRECT COSTS | $ | $ |
| | M. TOTAL DIRECT COSTS (A THROUGH L) | $ | $ |
| | N. INDIRECT COSTS (Specify rate(s) and base(s) for on/off campus activity. Where both are involved, identify itemized costs included in on/off campus bases in remarks.) | | |
| 74100 | TOTAL INDIRECT COSTS | $ | $ |
| | O. TOTAL DIRECT AND INDIRECT COSTS (M + N) | $ | $ |
| 74500 | P. LESS RESIDUAL FUNDS (If for further support of current project; GPM 252 and 253) | $ | $ |
| 75000 | Q. AMOUNT OF THIS REQUEST (O MINUS P) | $ | $ |

REMARKS

NOTE: SIGNATURES REQUIRED ONLY FOR REVISED BUDGET (GPM 233). THIS IS REVISION NO.

| SIGNATURE OF PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR | DATE OF SIGNATURE | TYPED OR PRINTED NAME AND TITLE |
|---|---|---|
| SIGNATURE OF AUTHORIZED ORGANIZATIONAL REPRESENTATIVE | DATE OF SIGNATURE | TYPED OR PRINTED NAME AND TITLE |

FOR NSF USE ONLY

| INDIRECT COST RATE VERIFICATION | | | PROGRAM OFFICER APPROVAL |
|---|---|---|---|
| Date Checked | Date of Rate Sheet | Signature | |

| Grant Number | Amend No. | Institution | Organization | Fund Acct. | Program | Object | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

| | Proposal Number | Dur. | Chg. | Award Date | Proposed Amount | Prpsd. Dur. | |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

PAGE 2 OF 2 PAGES

**SAMPLE BUDGET**
**SCIENCE CAREER WORKSHOP—PHASE A**
**WOMEN IN SCIENCE PROGRAM**

A. Participant Support

1. Travel for Commuting Participants

_____ _____ = _____
No. of participants Average cost of travel per participant

2. Lodging for Commuting Participants

_____ _____ = _____
No. of participants Average cost of lodging per participant

3. Meals and Breaks for All Participants

_____ _____ = _____
No. of participants Average cost of meals and breaks per participant

4. TOTAL: TRAVEL & SUBSISTENCE ..... _____

B. Salaries, Wages, and Staff Benefits

5. Professional Staff ..... _____
6. Secretarial-Clerical ..... _____
7. Staff benefits (If charged as direct costs) ..... _____
8. TOTAL: SALARIES, WAGES, & STAFF BENEFITS ..... _____

C. Visiting Experts

9. Travel ..... _____
10. Subsistence (lodging and meals) ..... _____
11. Honoraria ..... _____
12. TOTAL: VISITING EXPERTS ..... _____

D. Communications and Publicity

13. Office Supplies ..... _____
14. Postage and Telephone ..... _____
15. Advertising and printing ..... _____
16. TOTAL: COMMUNICATIONS AND PUBLICITY ..... _____

E. Other (Specify)

17. _____ _____
18. _____ _____
19. _____ _____
20. TOTAL: OTHER ..... _____

F. Indirect Costs ..... _____

TOTAL REQUESTED FROM NSF ..... _____

# WOMEN IN SCIENCE
# SCIENCE CAREER FACILITATION PROJECTS
# DIRECTORATE FOR SCIENCE EDUCATION
# COVER PAGE

| | |
|---|---|
| FOR CONSIDERATION BY NSF ORGANIZATIONAL UNIT | WOMEN IN SCIENCE PROGRAM |
| PROGRAM ANNOUNCEMENT/SOLICITATION NO. SE 80-26 | CLOSING DATE: January 2, 1980 |
| NAME OF SUBMITTING ORGANIZATION TO WHICH AWARD SHOULD BE MADE (INCLUDE BRANCH/CAMPUS/OTHER COMPONENTS) | |
| ADDRESS OF ORGANIZATION (INCLUDE ZIP CODE) | |
| TITLE OF PROPOSED PROJECT | SCIENCE CAREER FACILITATION PROJECT |
| AMOUNT REQUESTED FROM NSF<br>$ | PERIOD OF PROJECT OPERATION:<br>STARTING DATE: ENDING DATE: |
| DIRECTOR'S NAME AND SOCIAL SECURITY NO. (SSN)* (Dr., Prof., Mr., Ms.)<br>_____ SSN _____ | Phone No.<br>Home:*( ) _____<br>Office: ( ) _____ |
| DIRECTOR'S DEPARTMENT | DIRECTOR'S ORGANIZATION IF DIFFERENT FROM SUBMITTING ORGANIZATION |
| Are any funds for the project proposed herein being requested in another proposal to NSF or another Federal agency? _____<br>If yes, indicate NSF program or agency, proposal number(s), date submitted: | |

PROJECT DESCRIPTORS:

A. Highest Science Degree Offered by Proposing Institution:
Bachelor's _____ Master's _____ Ph.D. _____

B. Field of Training (if interdisciplinary, specify major disciplines involved):

_____

C. Period of Training for Full-Time Equivalents (months): _____

D. Number of Participants: _____

*Submission of social security and home phone numbers is voluntary and will not affect the organization's eligibility for an award. However, they are an integral part of the NSF information system and assist in processing the proposal. SSN solicited under NSF Act of 1950, as amended.

| PROJECT DIRECTOR | AUTHORIZED ORGANIZATIONAL REPRESENTATIVE | OTHER ENDORSEMENT (OPTIONAL) |
|---|---|---|
| Name (Dr.,; Prof.; Mr.; Ms.) | Name (Dr.; Prof.;Mr.;Ms.) | Name (Dr.;Prof.;Mr.;Ms.) |
| Signature | Signature | Signature |
| Title | Title | Title |
| Date | Date | Date |

NATIONAL SCIENCE FOUNDATION
Washington, D.C. 20550

# FINAL PROJECT REPORT
NSF FORM 98A

*PLEASE READ INSTRUCTIONS ON REVERSE BEFORE COMPLETING*

**PART I–PROJECT IDENTIFICATION INFORMATION**

| 1. Institution and Address | 2. NSF Program | 3. NSF Award Number |
|---|---|---|
| | 4. Award Period<br>From To | 5. Cumulative Award Amount |

6. Project Title

**PART II–SUMMARY OF COMPLETED PROJECT** *(FOR PUBLIC USE)*

**PART III–TECHNICAL INFORMATION** *(FOR PROGRAM MANAGEMENT USES)*

| 1. ITEM *(Check appropriate blocks)* | NONE | ATTACHED | PREVIOUSLY FURNISHED | TO BE FURNISHED SEPARATELY TO PROGRAM | |
|---|---|---|---|---|---|
| | | | | Check (√) | Approx. Date |
| a. Abstracts of Theses | | | | | |
| b. Publication Citations | | | | | |
| c. Data on Scientific Collaborators | | | | | |
| d. Information on Inventions | | | | | |
| e. Technical Description of Project and Results | | | | | |
| f. Other *(specify)* | | | | | |

| 2. Principal Investigator/Project Director Name *(Typed)* | 3. Principal Investigator/Project Director Signature | 4. Date |
|---|---|---|
| | | |

NSF Form 98A (5-78) Supersedes All Previous Editions

Form Approved OMB No. 99R0013

## INSTRUCTIONS FOR FINAL PROJECT REPORT
## (NSF FORM 98A)

This report is due within 90 days after the expiration of the award. It should be submitted in two copies to:

National Science Foundation
Division of Grants and Contracts
Post-Award Projects Branch
1800 G Street, N.W.
Washington, D.C. 20550

### INSTRUCTIONS FOR PART I

These identifying data items should be the same as on the award documents.

### INSTRUCTIONS FOR PART II

The summary (about 200 words) must be self-contained and intelligible to a scientifically literate reader. Without restating the project title, it should begin with a topic sentence stating the project's major thesis. The summary should include, if pertinent to the project being described, the following items:

- The primary objectives and scope of the project.
- The techniques or approaches used only to the degree necessary for comprehension.
- The findings and implications stated as concisely and informatively as possible.

This summary will be published in an annual NSF report. Authors should also be aware that the summary may be used to answer inquiries by nonscientists as to the nature and significance of the research. Scientific jargon and abbreviations should be avoided.

### INSTRUCTIONS FOR PART III

Items in Part III may, but need not, be submitted with this Final Project Report. Place a check mark in the appropriate block next to each item to indicate the status of your submission.

a. Self-explanatory.
b. For publications (published and planned) include title, journal or other reference, date, and authors. Provide two copies of any reprints as they become available.
c. Scientific Collaborators: provide a list of co-investigators, research assistants and others associated with the project. Include title or status, e.g. associate professor, graduate student, etc.
d. Briefly describe any inventions which resulted from the project and the status of pending patent applications, if any.
e. Provide a technical summary of the activities and results. The information supplied in proposals for further support, updated as necessary, may be used to fulfill this requirement.
f. Include any additional material, either specifically required in the award instrument (e.g. special technical reports or products such as films, books, studies) or which you consider would be useful to the Foundation.

# Publications Resulting From Evaluation And Dissemination Activities Of The Women In Science Program

## Completed

1. The Visiting Women Scientists Pilot Program, 1978, Final Report; Iris R. Weiss, Carol Place, Larry E. Conaway; August 1978; 66 pages plus appendices; available from the National Technical Information Service (NTIS) at a cost of $9.00 for hard copy or $1.00 for microfiche copy under the accession number PB 286372/AS. A 16-page highlights report is available from NTIS for $2.00 under the accession number PB 286373/AS.
2. The Visiting Women Scientists Program, 1978-79, Final Report; Carol Place, Larry E. Conaway, Iris R. Weiss, Mary Ellen Taylor; July 1979; 65 pages plus appendices. This report together with a 22-page highlights report will be submitted to the National Technical Information Service.
3. Manual on Program Operations for the Visiting Women Scientists Program; Iris R. Weiss and Larry E. Conaway; August 1979; available gratis from the Women in Science Program, Division of Scientific Personnel Improvement, Washington, D.C. 20550. Requests must be accompanied by a mailing label.
4. Roster of Women Scientists, prepared by Research Triangle Institute, is being published by the National Science Teachers Association and will be available from NSTA at 1742 Connecticut Avenue, N.W., Washington, D.C. 20009, for $3.50.

## In Preparation

1. A report on the evaluation of the Science Career Facilitation component, carried out by the Denver Research Institute of the University of Denver, will be published in 1980 by Praeger Publishers, 521 Fifth Avenue, New York, NY 10017. The author is Alma Lantz, and the tentative title is "Reentry Programs for Female Scientists."
2. A report on the evaluation of the Science Career Workshop component is being prepared by the NSF Science Education Directorate's Office of Program Integration; to be available gratis from the Women in Science Program, Division of Scientific Personnel Improvement, Washington, D.C. 20550. Requests must be accompanied by a mailing label.

**Intent-to-Submit Card:**

Complete and send to NSF as soon as possible

Name of Institution _____

Address _____

Type of Project (check one):

Science Career Workshop _____
Science Career Facilitation Project _____

Name and Address of Project Director _____
(type or print)

_____

Signature: Proposed Project Director _____

---

**Proposal Acknowledgment Cards**

(To be filled out by proposing institution)

Address this card to Institution's Business Office

TO BE FILLED OUT BY THE NATIONAL SCIENCE FOUNDATION

Date Received _____ Proposal No. _____

TO BE FILLED OUT BY THE PROPOSER

Program Title: Women in Science

Institution _____

Project Director _____

**The National Science Foundation acknowledges receipt of a proposal from the above applicant which has been assigned the proposal number indicated. Please use this number in all future correspondence.**

**A separate acknowledgment is being sent tc the individual named above.**

**Central Processing Section**
**Division of Information Systems**

**F.L. 23 (5-78)**

---

**Address this card to proposed Project Director/Principal Investigator**

TO BE FILLED OUT BY THE NATIONAL SCIENCE FOUNDATION

Date Received _____ Proposal No. _____

TO BE FILLED OUT BY THE PROPOSER

Program Title: Women in Science

Institution _____

Project Director _____

**Your proposal has been received by NSF and has been assigned to this program for evaluation. Please refer to the above number in all future correspondence.**

**Consideration of proposals requires about six to nine months. If more time is needed, you will be notified. After a decision has been made by NSF on a proposal, anonymous verbatim copies of reviewers' comments are available to the principal investigator upon request.**

**A separate acknowledgment is being sent to your institution's business office. If you have any questions about the status of your proposal, please contact us.**

**NATIONAL SCIENCE FOUNDATION**
**WASHINGTON, D.C. 20550**

**F.L. 24 (5-78)**

31L

National Science Foundation
Washington, D.C. 20550

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Division of Scientific Personnel Improvement
National Science Foundation
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**IF THIS CARD IS COMPLETED IT MUST BE PUT IN AN ENVELOPE AND ADDRESSED TO:**

**BBS/SE Branch**
**Division of Grants and Contracts**
**National Science Foundation**
**Washington, D.C. 20550**

## APPLICANT MANAGMENT AND ORGANIZATION CARD

**TO BE FILLED OUT BY THE NATIONAL SCIENCE FOUNDATION**

Date Received_____ Proposal Number_____

**TO BE FILLED OUT BY THE PROPOSER**

Name of Institution_____

Name of Project Director_____

Name of Director of
Sponsored Programs(or equivalent)_____

Telephone Number_____

NOTE: If your institution has not received an NSF grant within the past 2 years, please fill out this card and attach it to the original signed copy of the proposal when submitted to NSF.